

WHAT IS CLAIMED IS:

1. A method of restricting fluid flow through a bronchial passageway in a patient's lung comprising:

providing a flow control element comprising a plurality of leaflets movable
5 from a closed position to an open position, the leaflets each having a distal surface, a proximal surface opposite the distal surface, and an engagement surface, the engagement surfaces of the leaflets engaging each other in the closed position;
positioning the flow control element through the patient's trachea into the bronchial passageway; and

10 anchoring the flow control element within the bronchial passageway;
wherein the proximal surfaces of the leaflets are engaged by fluid when the patient inhales to urge the engagement surfaces into engagement with each other to maintain the leaflets in the closed position.

15 2. The method of claim 1, wherein the distal surfaces are engaged by fluid when the patient exhales to move the leaflets to the open position.

3. The method of claim 1, wherein the engagement surface of each leaflet comprises a portion of the distal surface of the leaflet.

20 4. The method of claim 1, wherein the engagement of the leaflets with each other prevents the leaflets from opening when the patient inhales.

5. The method of claim 1, wherein the proximal surfaces of the leaflets are disposed at an obtuse angle relative to a longitudinal axis of the flow control element.

6. The method of claim 1, wherein the proximal surfaces of the leaflets are disposed at an angle substantially greater than 180° relative to each other.

7. The method of claim 1, wherein the flow control element is positioned through the patient's trachea in a collapsed configuration, the anchoring step comprising expanding an expandable portion of the flow control element to an expanded configuration to engage a wall of the bronchial passageway.

8. The method of claim 7, wherein the flow control element comprises a stent, the stent being expanded during the step of anchoring.

9. A method of restricting fluid flow through a bronchial passageway in a patient's lung comprising:

deploying a flow control element in the bronchial passageway, the flow control element comprising plural flaps that are oriented transverse to a direction of fluid flow through the bronchial passageway, wherein the flaps are movable between a closed position wherein the flaps press against one another to obstruct the bronchial passageway, and an open position wherein the flaps form an opening through which fluid can flow through the bronchial passageway.

10. The method of claim 9, wherein the flaps have distal surfaces that oppose fluid flowing in exhalation direction such that fluid flowing in an exhalation direction engages the distal surfaces to move the flaps so as to increase the size of the opening.

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11. The method of claim 9, wherein the flaps have proximal surfaces that oppose fluid flowing in inhalation direction such that fluid flowing in an inhalation direction engages the proximal surfaces to push the flaps toward the closed position.

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12. The method of claim 11, wherein portions of the distal surfaces of the flaps press against one another when the flaps are in the closed position.

13. The method of claim 9, wherein the distal surfaces are opposed to one another when the flaps are in the closed position.

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14. The method of claim 9, wherein the flaps are inclined with respect to the direction of fluid flow when the flaps are in the closed position.

15. The method of claim 9, wherein the flow control element includes two
20 flaps.

16. The method of claim 9, additionally passing the flow control element through the patient's trachea to the bronchial passageway.

17. The method of claim 9, additionally comprising anchoring the flow control element in the bronchial passageway.

18. The method of claim 17, wherein anchoring the flow control element
5 comprises expanding the size of the flow control element so that the flow control element engages a wall of the bronchial passageway.

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